

(TM)

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protein - protein database search, using Smith-Waterman algorithm

Maspar time 3.92 Seconds

output not generated.

(120-161) from US09331631.pep (4 of 4)

Score: 344

table: PAM 150

188963 seqs, 23686106 residues

Processing: Minimum Match 0%

a-geneseq35

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cs: Mean 23.518; Variance 86.543; scale 0.272
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Pred. NO. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Score	Query Match	Length	DB	ID	Description	Pred.	NO
344	100.0	590	1	W65832	Gossypium hirsutum ant	8.96e-28	1
168	48.8	525	1	W62831	Theobroma cacao antimi	1.1e-08	1
168	48.8	566	1	R20181	Sequence encoded by 67	1.1e-08	1
128	37.2	666	1	W62828	Macadamia integrifolia	1.50e-04	1
127	36.9	666	1	W62829	Macadamia integrifolia	1.89e-04	1
120	34.9	625	1	W62830	Macadamia integrifolia	9.49e-04	1
104	30.2	637	1	W62837	Hordeum vulgare antiml	3.46e-02	1
96	27.9	28	1	W62841	Stenotaphrum sinuatus a	2.01e-01	1
94	27.3	444	1	W90340	G. max truncated SBP1	3.11e-01	1
94	27.3	524	1	W90339	G. max SBP1 protein.	3.11e-01	1
93	27.0	35	1	R21079	Antimicrobial maize pe	3.86e-01	1
89	25.9	1211	1	W47028	Human N-proteinase (13	9.13e-01	1
88	25.6	33	1	W62836	Zea mays antimicrobial	1.13e+00	1
88	25.6	593	1	W62835	Zea mays antimicrobial	1.13e+00	1
84	24.4	393	1	W03474	Mouse Ssr-related prot	4.96e+00	1
81	23.5	409	1	W90342	G. max truncated SBP2	2.55e+00	1
81	23.5	489	1	W90341	G. max SBP2 protein.	4.51e+00	1
79	23.0	276	1	P91657	Long overlapping open r	7.51e+00	1
79	23.0	277	1	P91656	Bovine N-proteinase.	7.51e+00	1
78	22.7	1206	1	W47030	Cellulose synthase. Pcs	1.33e+01	1
76	22.1	354	1	W73310	Spinoecerebellar ataxia	1.33e+01	1
76	22.1	816	1	R71111	Colon cancer associate	1.71e+01	1
75	21.8	303	1	Y01101			

45	72	20.9	1	W09871	Human huntingtin.	3.14e+01
44	72	20.9	438	1	W59836	3.14e+01
43	72	20.9	140	1	P91891	3.14e+01
42	72	20.9	94	1	W95080	3.14e+01
41	72	20.9	86	1	W95073	3.14e+01
40	72	20.9	86	1	W95078	3.14e+01
39	72	20.9	63	1	W95079	3.14e+01
38	72	20.9	55	1	W95077	3.14e+01
37	73	21.2	3163	1	HPA0135 CB virus (HC	2.57e+01
36	73	21.2	850	1	Mouse p10RNP-III protein	2.57e+01
35	74	21.5	1000	1	Human ADNF-III protein	2.09e+01
34	74	21.5	806	1	Mouse ADNF-III protein	2.09e+01
33	74	21.5	800	1	Seq ID 11 from W098350	2.09e+01
32	74	21.5	787	1	Mouse ADNF-III protein	2.09e+01
31	74	21.5	781	1	Mouse ADNF-III protein	2.09e+01
30	74	21.5	737	1	Deltex protein produce	2.09e+01
29	74	21.5	737	1	Drosophila Deltex prot	2.09e+01
28	74	21.5	737	1	Deltex tagged TBP pro	2.09e+01
27	74	21.5	737	1	Deltex protein.	2.09e+01
26	75	21.8	1291	1	Protein encoded by the	1.71e+01
25	75	21.8	1290	1	Human Per gene product	1.71e+01
24	75	21.8	369	1	Mature durum wheat gln	1.71e+01
23	75	21.8	369	1	Mature durum wheat gln	1.71e+01
22	75	21.8	369	1	Mature durum wheat gln	1.71e+01
21	75	21.8	369	1	Mature durum wheat gln	1.71e+01
20	75	21.8	369	1	Mature durum wheat gln	1.71e+01
19	75	21.8	369	1	Mature durum wheat gln	1.71e+01
18	75	21.8	369	1	Mature durum wheat gln	1.71e+01
17	75	21.8	369	1	Mature durum wheat gln	1.71e+01
16	75	21.8	369	1	Mature durum wheat gln	1.71e+01
15	75	21.8	369	1	Mature durum wheat gln	1.71e+01
14	75	21.8	369	1	Mature durum wheat gln	1.71e+01
13	75	21.8	369	1	Mature durum wheat gln	1.71e+01
12	75	21.8	369	1	Mature durum wheat gln	1.71e+01
11	75	21.8	369	1	Mature durum wheat gln	1.71e+01
10	75	21.8	369	1	Mature durum wheat gln	1.71e+01
9	75	21.8	369	1	Mature durum wheat gln	1.71e+01
8	75	21.8	369	1	Mature durum wheat gln	1.71e+01
7	75	21.8	369	1	Mature durum wheat gln	1.71e+01
6	75	21.8	369	1	Mature durum wheat gln	1.71e+01
5	75	21.8	369	1	Mature durum wheat gln	1.71e+01
4	75	21.8	369	1	Mature durum wheat gln	1.71e+01
3	75	21.8	369	1	Mature durum wheat gln	1.71e+01
2	75	21.8	369	1	Mature durum wheat gln	1.71e+01
1	75	21.8	369	1	Mature durum wheat gln	1.71e+01

## ALIGNMENTS

ID	RESULT	1	2
ID	W62832	standard; Protein; 590 AA.	
AC	W62832;		
DT	27-OCT-1998	(first entry)	
DE	Gossypium hirsutum antimicrobial protein.		
KW	antimicrobial protein; infestation; control.		
OS	Gossypium hirsutum.		
PN	WO9827805-A1.		
PD	02-JUL-1998.		
PF	22-DEC-1997; AU0874.		
PR	20-DEC-1996; AU-004275		
PA	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.		
PI	Bower NJ, Goulter KC, Green JL, Manners JM, Marcus JP;		
DR	WPI; 98-377279/32.		
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia -		
CC	useful for controlling microbial infestations of plants or mammals		
CC	Claim 1. Page 49-51. 96pp. English.		
CC	The sequence is that of an antimicrobial protein which can		
CC	be used to control microbial infestations in plants and mammalian		
CC	animals.		
SQ	Sequence	590 AA;	
Query Match	100.0%;	Score 344;	DB 1; Length 590;
Best Local Similarity	100.0%;	Pred. NO. 8.96e-28;	
Matches	42;	Conservative	0; Mismatches 0; Indels 0; Gap
Db	120	SQRFQECQCHHQEOHQEQRPEKKQCYRECEKRYQENPWGER	161
QY	120	SQRFQECQCHHQEOHQEQRPEKKQCYRECEKRYQENPWGER	161
RESULT	2		
ID	W62831	standard; Protein; 525 AA.	
AC	W62831;		
DT	27-OCT-1998	(first entry)	
DE	Theobroma cacao antimicrobial protein.		
KW	antimicrobial protein; infestation; control.		
OS	Theobroma cacao.		
PN	WO9827805-A1.		
PD	02-JUL-1998.		
PF	22-DEC-1997; AU0874.		
PR	20-DEC-1996; AU-004275.		
PA	(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.		
PI	Bower NJ, Goulter KC, Green JL, Manners JM, Marcus JP;		
DR	WPI; 98-377279/32.		
PT	Novel anti-microbial protein from e.g. Macadamia integrifolia -		
CC	useful for controlling microbial infestations of plants or mammals		







DT 27-OCT-1998 (first entry)  
 DE Zea mays antimicrobial protein.  
 KM antimicrobial protein; infestation; control.  
 OS Zea mays.  
 PN MO9827805-A1.  
 PD 02-JUL-1998.  
 PF 22-DEC-1997; AU0874.  
 PR 20-DEC-1996; AU-004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 PI Bower NI, Goulter KC, Green JL, Manners JW, Marcus JP;  
 DR MPI: 98-377279/32  
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -  
 PT useful for controlling microbial infestations of plants or mammals  
 PS Claim 1; Page 58-60; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can  
 CC be used to control microbial infestations in plants and mammalian  
 CC animals.  
 SQ Sequence 593 AA;

Query Match 25.6%; Score 88; DB 1; Length 593;  
 Best Local Similarity 37.0%; Pred. No. 1.13e+00;  
 Matches 10; Conservative 10; Mismatches 6; Indels 1; Gaps 1;

Db 566 ECRRCIRRHGQPMETQECMRRCRR 592  
 11::1 ::1 :1 1:1 11 :  
 QY 126 ECOQHC-HQEOQRPKKQCCVRECREK 151

## RESULT 15

ID W03474 standard; Protein: 395 AA.  
 AC W03474;  
 DT 23-OCT-1996 (first entry)  
 DE Mouse SRY-related protein.  
 KM Mouse; SRY; primer; PCR; polymerase chain reaction; amplification; probe;  
 KW HMG box; human; bovine; sex; animal; birth.  
 OS Mus musculus.  
 PN J08154685-A.  
 PD 18-JUN-1996.  
 PF 30-NOV-1994; 319525.  
 PR 30-NOV-1994; JP-319525.  
 PA (KACH-) KACHIKU JUSEIRAN ISHOKU GIKUTSU KENKYUKU.  
 DR WPI: 96-336575/34.  
 DR N-PSDB: T33007.  
 PT Bovine and mouse Sry-related DNA - useful for detecting e.g. the sex  
 PT of unborn animals  
 PS Claim 1; Page 10-14; 21pp; Japanese.  
 CC This is the amino acid sequence of a mouse SRY-related protein. The gene  
 CC was isolated from a mouse genomic library using a cDNA fragment amplified  
 CC by primers T33009-10 as a probe. The screen isolated 4 EcoRI fragments  
 CC of 2.3, 2.8, 3.5 and 1.5 kb covering the gene. Sequence analysis revealed  
 CC a 240 bp HMG box sequence between bases 7154-7393. Similarity with the  
 CC human SRY HMG box sequence resulted in primers being generated to amplify  
 CC the human SRY HMG box sequence for use as a probe to isolate the bovine  
 CC SRY-related gene (T33008). The mouse and bovine genes are useful for  
 CC determining the sex of an animal prior to birth.  
 SQ Sequence 395 AA;

Query Match 24.4%; Score 84; DB 1; Length 395;  
 Best Local Similarity 47.8%; Pred. No. 2.64e+00;  
 Matches 11; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

Db 268 QQQFHDHQQQHQFHDHPQQKQQ 290  
 11::1 11:11 ::1 111  
 QY 121 QROFOECQCHQEOQRPKKQQ 143

Search completed: Sat May 13 11:04:20 2000  
 Job time : 8 secs.

